TAB B-1

SSN SONAR OPERATOR QUALIFICATION CARD (All SSNs)

NAME: Rhodes Stuart A
RATE: STS NECs:
DATE QUALIFICATION COMMENCED:
DATE QUALIFICATION DUE:
DATE OUALIFICATION COMPLETED:

All items must be signed by a qualified Sonar Supervisor unless otherwise indicated.

This qualification card is designed to be used in conjunction with the SSN Sonar Operator Qualification guide, Tab B-2.

EXHIBIT 63
PAGE ____OF ___/

4-B-1-1

SSN SONAR OPERATOR QUALIFICATION CARD

PASSIVE BROADBAND (PBB) OPERATOR

	1. PREREQUISITES:	Signature	Date	
		[83/86] HM	<u>170000</u>)
	2. KNOWLEDGE REQUIREMENTS:			
	 a Working understanding of Sonar Division and Sonar Watch Section organization and regulations. b. Working understanding of responsibilities of each member of the sonar Watch Section. 	ST LPO	3/5 14 NOVO	0
	b. Working understanding of responsibilities of each member of the sonar Watch Section.	ST LPO	18 14 NOVOC	
0	c. Working understanding of Sonar Control Room and Control Room sonar equipment to be manned, positions to be occupied for various ship's missions and evolutions.	i		
•	(d) Working understanding of relief procedures for PBB operators	Willy	DONOI	
	e. Working understanding of the ship's sonar search, localization, tracking, and classification objectives.			
	f. Working understanding of sonar watch section routines.	Mily	20 TANOF.	
	g. Working understanding of electrical and electronic equipment safety precautions.	ST LPO	20 F2801	FIEL SAF
	h. Complete understanding of location and electrical isolation of all sonar equipment, special equipment, and the location of the nearest fire extinguishers and damage control equipment.	•		
	Working understanding of the format for passive sonar reporting procedures and to whom these reports are made.	(112)	MARCY_	
	Basic concepts and units of sound.	MM	23/530	76-1
	k Working understanding of types, formation, and behavior of sound paths in the ocean.		-	76-1
	4-B-1-2		2 63	·

	1,00	
1.) Working understanding of spreading, attenuation, and boundary sound propagation losses in the ocean.	May	310000
m. Working understanding of natural and man-made ambient noise and the types of self-noise as a composite of sonar background noise.	ang_	28m)9
n. Working understanding of the types, causes, and characteristics of target radiated noise.	WY.	285mc)
o. Working understanding of relative motion from a sonar operator's point of view.		
p Working understanding of search, localization, track and classification methods (as applicable to the ship's installed sonar suite and the equipment to be manned by the PBB operator).		
q. Working understanding of operating PBB sonar consoles with reduced sonar suite capabilities (degraded mode operations) incident to a loss of an electrical bus, computer failure, loss of display, loss of mode, etc.		
r. Working knowledge of the use of the Parameter Select Matrix for all applicable operational functions or tasks.	W W	780mg
s. Working knowledge of passive broadband sonar performance prediction.	SW KJ	
t. Discuss in detail all methods for towed array ranging techniques associated with the PBB function.		77
u. Discuss in detail all methods used to obtain bottom bounce, D/E, and ping steal ranges.		
v. Working knowledge of passive systems fundamentals.		
w. Detailed knowledge of PBB operations.		
x. Knowledge of COMSUBLANT/COMSUBPAC Collisions Brief.	ST LPO	-
y. Knowledge of COMSUBLANT/COMSUBPAC Lessons Learned (Sonar and Sound Silencing Section).	ST LPO	

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FURE 3 OF //

COMSUBLANT/COMPACINST 5400.40A 22 AUG 1997

3. PRACTICAL FACTORS:

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a. Listen to and work through the latest of the "B" series of Sonar Operator Training tapes (NSTAP 2-79 Tapes 1-6)	ST LPO	
b Demonstrate ability to distinguish among surface ships, submerged submarines, torpedoes, and biological sounds.	What	130500
c. Demonstrate ability to detect, identify, report, and track contacts which pose an immediate threat to own ship (submerged submarines, close aboard contacts, torpedoes) by means of taped, synthetic, trainer, or actual signals.	<u>W. 201</u>	130000
d Demonstrate ability to determine propeller RPM and the number of running propellers by taking aural turn counts.	WV. Elg	130000
e Demonstrate ability to correctly and completely annotate applicable logs, records, and displays.	ST LPO	
f. Demonstrate ability to change tape and annotate tape headings on installed tape recorders.	$\overline{\mathcal{M}}$	
g. Demonstrate ability to properly employ/operate all display enhancements associated with the Passive Broadband function with proficiency to search for, detect, report, track, and classify contacts.	Africa de la companya della companya	22 FBB 01
h. Demonstrate ability to man the passive broadband console to search for and track contacts under multi-contact situations.	My	140pt 0)
i. Demonstrate ability to utilize the tracker and audio filters to enhance detection and track quality.	My	23FEBO1
j. Demonstrate the ability to electrically isolate all installed sonar equipment.		
Le Demonstrate ability to line up the PBB Console for Firing Point Procedures.	MIG -	9,7A~01
1. Demonstrate ability to monitor own ship weapons after launch.		2/a/b/
m. Demonstrate ability to accurately and completely record data in all logs/records/reports peculiar to the sonar watchstander.	ST LPO	-

n. Demonstrate proficiency as a PBB operator.

4. TRAINING WATCHES:

a. Stand a minimum of four PBB operator watches under instruction.

5. EXAMINATION AND CERTIFICATION:

a. Successfully completed a comprehensive written exam prepared by the ST LPO and approved by the Combat Systems Officer. Grade _____

ST LPO

b. Examined and recommended for qualification as a PBB operator.

ST LPO

c. Examined and recommended for qualification as a PBB operator.

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d. Examined and certified as a qualified Passive Broadband Operator, capable of standing watches unassisted on the PBB sonar consoles.

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6. ADMINISTRATION.

a. Entry made in the Ship's Qualification Notebook.

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b. Entry made in member's Service Record (page 4).

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COMSUBLANT/COMSUBPACINST 5400.29 3 MAR 1997

USS_____NAVOPSDEPTINST 5400.___

430	7	AN/WLR-8 OPERATOR QUALIFICATION CARD		$\overline{}$
	NAM	E BRUNER DISTIN J	rate_£]	<u> </u>
	DAT	E STARTED	DATE DUE_	
1.	Pre	requisites	DATE	SIGNATURE
	a.	Completed Basic Navigation/Operations Department Qualification.	PUNAL	LPO
	b.	Completed AN/BRD-7 Operator Qualification.		
2.	Kno	wledge Requirements	, /	LPO
	a.	Commanding Officer's Standing Orders and requirements contained therein.	1/18/01	SAM
	b.	MC and phone circuits used in Radio/ESM.	1/08/21	229
	c.	Purpose of the AN/WLR-8(V).	1/08/01	[2]
	d.	Demonstrate a detailed knowledge of all equipment locations and power sources.	1/10/01	Afr
	e.	Draw a one-line diagram of RF distribution from antennas associated with the AN/WLR-8.		
	f.	Draw a sketch of all ESM antennas. Show location and frequency coverage.		
	g.	Describe the frequency capabilities of all antenna associated with the AN/WLR-8.	s 1/18/07	- CHAIN
	h.	Describe the purpose and use of all switches and indicators located on the periscope E/E adapter, radio room box and ESM Room box that affect the operation of the AN/WLR-8.	DIANO!	film 1
	i.	Describe the purpose and function of all circuit breakers, switches, display scopes and indicators associated with Units 1, 2, and printer of the AN/WLR-8 system.	4/30/04	
	ź.	Discuss the three modes of operation, their function when each is used and the capabilities.	on SUANG	1 <u> </u>
	k.	Describe the indications displayed on the Control Indicator (C-10209) and list the purpose of each.	(ZIANO)	Cal
	1.	Discuss casualty modes of operation.	8 JANY +	65M

COMSUBLANT/COMSUBPACINST 5400.29 **8 MAR 1997**

NAVOPSDEPTINST 5400. Practical Factors \star a. Electrically isolate the AN/WLR-8. Demonstrate the ability to: (1) Perform system turn-on. Identify the proper auto fault indication. (2) Load the operational program from magnetic tapel 40 AM configure, and start the program (3) Perform System Self-Test and interpret the indication (4) Perform the Self-Test for all units so equipped. 29.701 Demonstrate the ability to operate the system in the MIRNO Scan Lock Mode ensuring proper entries of parameters for full analysis and classification. OKOANO! Demonstrate the ability to operate the system in the Direct Operator Controlled (DOC) Mode, including use of all three sub-modes for full analysis and classification. e. Demonstrate the ability to operate the system in the AJAN system in the Manual Back-up Mode including performance of full analysis and classification. Explain what units this mode bypasses. Demonstrate the ability to operate the system using 291ANthe library storage capability, including entering, and utilizing stored data. Demonstrate the ability to output information to the printer. Demonstrate the ability to secure the system under normal and emergency conditions.

underway checks.

j. Demonstrate the ability to complete all PMS requirements on the AN/WLR-8 system.

k. Demonstrate the ability to perform audio patching and operate the audio recorder/reproducer.

1. Prepare a Radar Target Signals List per 2-13.10.1. 21 Mills LDM

Demonstrate the ability to perform the AN/WLR-8 pre-291AM

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COMSUBLANT/COMSUBPACINST 5400.29

USS	NAVOPSDEPTINST	5400.
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	<u> </u>	DATE	SIGNATURE		
m.	Demonstrate the ability to detect live signals and	1/20/01	M		
	(1) Frequency (2) PRF (3) PW (4) Scan time (5) Scan type (Video/Audio) (6) Type of emission (Visual) (7) Bearing (as applicable, using ADF) (8) Signal strength (9) Modulation types (10) Radar function (11) ELINT notation	1801 11501 11501 11504 11504 1504 1504 150			
n.	Demonstrate proficiency in making the proper report to the CONN within specified times.	ts 1/3/31	<u>ESH.</u>		
٥.	Demonstrate proficiency in the use of and data contained in the following manuals:	1/20/01	all .		
p.	 (1) NWP 3-13.10.1 Submarine Electronic/Optic Senso Employment Manual (2) NWP 10-1-40 Electronic Warfare Coordination (3) MCM 3-1 VOL II (4) Defense Intelligence "Electronic Order of Batt (EOB)" for the projected mission area. (5) NSA EPL Non-Communist Bloc (6) NSA EPL Communist Bloc (7) PER 1 (8) PER 2 (9) NWP 3.13.10.1(VOL 1) AN/WLR-8(V)2 or NWP 3.13.10.1 (VOL 4) AN/WLR-8(V)5 Operational Guidelines. (10) FIGSOP Demonstrate the ability to determine "Satellite Safe Time" using the HP 9020 SFMPL, Satellite 	291AN	259 239 239 239 239 239 24 24 24 24		
	Vulnerability Program.				
Tra	ining Watches	, 1	. 4 .1		
Sta dem	oureraced acceptante brotrorenel an am annual	1) / 80/ 2) 29 AND 3) 30 AND	139 31404		
Examination and Certification					
a.	Successfully complete a comprehensive written examination prepared by the COMM LPO and approved by the Navigator. Grade:	he	LPO		

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COMSUBLANT/COMSUBPACINST 5400.29 MAR 1997

USS____NAVOPSDEPTINST 5400.___

431	0 X	N/BRD-7 OPERATOR QUALIFICATION CARD		
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DAT	E ST	ARTED DATE DUE		
1.	Pre	requisites	DATE	SIGNATURE
	a.	Completed Basic NAVOPS Department Qualification.	424/00	My C
2.	Knov	rledge Requirements		10
	a.	Commanding Officer's Standing Orders and requirements contained therein.	Herley	
	b.	MC and phone circuits associated with radar operations.	, seed (L2	DALHUS.
	c.	Purpose of the AN/BRD-7.	<u>POHALPS</u>	Patrick
	d.	Describe the purpose and use of all front panel switches, indicators, and displays.	SCAMO	PAHU
	e.	Draw a one line diagram of RF distribution from antennas to receiver.		
	f.	Discuss various casualty modes of operation.	1044/42	PalMI)
	g.	Have a detailed knowledge of the following operations and features of the AN/BRD-7 system including:	ifrefer	
		(1) Frequency range of the following:		- 1 44 1
		(a) LF/MF (b) HF (c) VHF-I (d) VHF-2 (e) VHF-3 (f) Low Band DF (g) High Band DF	25/14/201 25/14/201 25/14/201 25/14/201 1/25/4	
		(2) Operating Controls and Indicators:		
		 (a) Local Unit 2AI (b) Printer Assembly 2A2 (c) Assembly 2A4 (d) Remote unit 3A2 (e) Assembly 3A6 	1/28/01 Zevanos 1/28/01 1/28/01 1/28/01	M.C.
	h.	Demonstrate a knowledge of the Mast/Scope indicator and the mast override switch.	24VANA	All

EXEMBIT 63
PAGE 9 OF 11

COMSUBLANT COMSUBPACINST 5400.29

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		<i>≯</i> . ★	DATE	SIGNATURE
	i.	Demonstrate working knowledge of the CRT PAN displays.	791 AD 01	Zull
	j.	Demonstrate a working knowledge of the following modes of operation:		
		(1) Operation (2) Quick Look (3) Internal Test	1/2/01	
		(4) External Test	1/28/01	The Contract of the Contract o
		(5) Situation	1/12/01	1/2
	k.	Describe the DF print out.	10 MALPS	DUMKS
3.	Pra	ctical Factors		
	a.	Complete an operations intercept log using information from the AN/BRD-7.	10CALIT	DIA!
	b.	Raise and lower the AN/BRD-7 mast.	<u>verson</u>	BLHILL
	c.	Perform system turn-on procedure.	10MACOE	10/1
	d.	Demonstrate the ability to insert all instructions.	302740	from the second
	e.	Demonstrate the ability to program for automatic DF operation.	303746	To have
	f.	Demonstrate the ability to manually assign a receiver and obtain a DF on signals in LF/MF, HF, VHF-1, VHF-2 and VHF-3.	ANA COS	inc
	g.	Demonstrate the ability to eliminate interfering signals.	ZQJAJOL	Della Contraction of the Contrac
	h.	Demonstrate a working knowledge of a threat signal.	31)A+751	Valt to
	i.	Demonstrate the ability to search for and analyze signals in all frequency bands and report the results to the CONN in the specified times.	MACRS	of Delated
	์ ว •	Using a bearing correction chart; DF and correct a signal of interest.		
	k.	Prepare a Communications Target Signal List per NWP 3-13.10.1.	<u>24) AN O</u> I	Palmu
	1.	Demonstrate proficiency in the use of and data contained in the following manuals:	<u> </u>	
		(1) NWP 3-13.10.1 Submarine Electronic/Optic Sensor Employment Manual.		

NAVOPSDEPTINST 5400. USS SIGNATURE DATE 29JANGE 1 (2) NWP 10-1-40 Electronic Warfare Coordination 1041675 (3) NWP 3-55.412 (REV A) AN/BRD-7 Operating Guidelines. NO JANOT (4) MCM 3-1 VOL 11 (5) Defense Intelligence "Electronic Order of Battle" (EOB) for the projected mission area. ZUANO (6) NSA EPL Non-Communist Bloc 25UAMOI (7) NSA EPL Communist Bloc (8) FIGSOP ZWANDI Demonstrate a working knowledge of the SFMPL "Cactus" Program. Training Watches Stand three watches under instruction and demonstrate(1) acceptable proficiency as an AN/BRD-7 Operator. Examination and Certification a. Successfully complete a comprehensive written examination prepared by the COMM LPO and approved by. LPO the Navigator. Grade:_ b. Examined and recommended for AN/BRD-7 Operator LCPO Qualification. c. Examined and recommended for AN/BRD-7 Operator DIVISION Qualification. OFFICER Examined and certified as a qualified AN/BRD-7 NAVIGATOR Operator.

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NAVIGATOR

PERSONNEL OFFICER

a. Entry made in the Ship's Qualification Notebook.

b. Entry made in service record (page 4).

6.

Administration